

# Venkatesan Jambunathan

## List of Publications by Year in descending order

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78  
papers

853  
citations

516710

16  
h-index

526287

27  
g-index

78  
all docs

78  
docs citations

78  
times ranked

616  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spectroscopic characterization of Yb <sup>3+</sup> -doped laser materials at cryogenic temperatures. Applied Physics B: Lasers and Optics, 2014, 116, 75-81.	2.2	70
2	Status of the High Average Power Diode-Pumped Solid State Laser Development at HiLASE. Applied Sciences (Switzerland), 2015, 5, 637-665.	2.5	65
3	High-Contrast, High-Intensity Petawatt-Class Laser and Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 232-249.	2.9	60
4	Microchip Yb:CaLnAlO <sub>4</sub> lasers with up to 91% slope efficiency. Optics Letters, 2017, 42, 2431.	3.3	57
5	Overview of the HiLASE project: high average power pulsed DPSSL systems for research and industry. High Power Laser Science and Engineering, 2014, 2, .	4.6	43
6	Highly Efficient, Compact Tm <sup>3+</sup> :RE <sub>2</sub> O <sub>3</sub> (RE = Y, Lu, Sc) Sesquioxide Lasers Based on Thermal Guiding. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-13.	2.9	40
7	Microchip laser operation of Yb-doped gallium garnets. Optical Materials Express, 2016, 6, 46.	3.0	31
8	Growth, spectroscopy and laser operation of Ho:KY(WO <sub>4</sub> ) <sub>2</sub> . Journal of Luminescence, 2016, 179, 50-58.	3.1	26
9	Spectroscopic investigations of thulium doped YAG and YAP crystals between 77 K and 300 K for short-wavelength infrared lasers. Journal of Luminescence, 2018, 202, 427-437.	3.1	26
10	CW lasing of Ho in KLu(WO <sub>4</sub> ) <sub>2</sub> in-band pumped by a diode-pumped Tm:KLu(WO <sub>4</sub> ) <sub>2</sub> laser. Optics Express, 2010, 18, 20793.	3.4	24
11	Continuous-wave laser generation at ~21 μm in Ho:KRE(WO <sub>4</sub> ) <sub>2</sub> (RE = Y, Gd, Lu) crystals: a comparative study. Optics Express, 2011, 19, 25279.	3.4	23
12	Continuous-wave co-lasing in a monoclinic co-doped (Ho,Tm):KLu(WO <sub>4</sub> ) <sub>2</sub> crystal. Laser Physics Letters, 2011, 8, 799-803.	1.4	21
13	Investigations on Ferroelectric PZT-PVDF Composites of 3 Connectivity. Ferroelectrics, 2005, 325, 121-130.	0.6	20
14	Spectroscopic and lasing characteristics of Yb:YGAG ceramic at cryogenic temperatures. Optical Materials Express, 2015, 5, 1289.	3.0	19
15	Diode-Pumped Ho-Doped KLu(WO <sub>4</sub> ) <sub>2</sub> Laser at 2.08 μm. Applied Physics Express, 2011, 4, 072601.	2.4	17
16	Crystal growth, optical spectroscopy, and continuous-wave laser operation of co-doped (Ho,Tm):KLu(WO <sub>4</sub> ) <sub>2</sub> monoclinic crystals. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 1415.	2.1	17
17	Design of a kJ-class HiLASE laser as a driver for inertial fusion energy. High Power Laser Science and Engineering, 2014, 2, .	4.6	15
18	Crystal growth, optical spectroscopy, and continuous-wave laser operation of Ho:KLu(WO <sub>4</sub> ) <sub>2</sub> crystals. Applied Physics B: Lasers and Optics, 2014, 116, 455-466.	2.2	15

#	ARTICLE	IF	CITATIONS
19	Graphene Q-Switched Compact Yb:YAG Laser. IEEE Photonics Journal, 2015, 7, 1-7.	2.0	15
20	Efficient laser performance of a cryogenic Yb:YAG laser pumped by fiber coupled 940 and 969nm laser diodes. Laser Physics Letters, 2015, 12, 015002.	1.4	15
21	Near-infrared photoluminescence from Ho <sup>3+</sup> -doped monoclinic KLu(WO <sub>4</sub> ) <sub>2</sub> crystal codoped with Tm <sup>3+</sup> . Journal of Luminescence, 2009, 129, 1882-1885.	3.1	14
22	Cryogenic Yb:YAG Laser Pumped by VBG-Stabilized Narrowband Laser Diode at 969 nm. IEEE Photonics Technology Letters, 2016, 28, 1328-1331.	2.5	14
23	Passive Q-switching of a Tm,Ho:KLu(WO <sub>4</sub> ) <sub>2</sub> microchip laser by a Cr:ZnS saturable absorber. Applied Optics, 2016, 55, 3757.	2.1	14
24	Overview of ytterbium based transparent ceramics for diode pumped high energy solid-state lasers. High Power Laser Science and Engineering, 2018, 6, .	4.6	14
25	Spectroscopic characterization of various Yb <sup>3+</sup> -doped laser materials at cryogenic temperatures for the development of high energy class diode pumped solid state lasers. Proceedings of SPIE, 2013, , .	0.8	13
26	Comparative LIDT measurements of optical components for high-energy HiLASE lasers. High Power Laser Science and Engineering, 2016, 4, .	4.6	11
27	Q-switching of a Tm,Ho:KLu(WO <sub>4</sub> ) <sub>2</sub> microchip laser by a graphene-based saturable absorber. Laser Physics Letters, 2016, 13, 025801.	1.4	10
28	Spectroscopy and diode-pumped continuous-wave laser operation of Tm:Y <sub>2</sub> O <sub>3</sub> transparent ceramic at cryogenic temperatures. Applied Physics B: Lasers and Optics, 2020, 126, 1.	2.2	10
29	Crystal growth, low-temperature spectroscopy and multi-watt laser operation of Yb:Ca <sub>3</sub> NbGa <sub>3</sub> Si <sub>2</sub> O <sub>14</sub> . Journal of Luminescence, 2018, 197, 90-97.	3.1	9
30	Fs-laser-written erbium-doped double tungstate waveguide laser. Optics Express, 2018, 26, 30826.	3.4	9
31	Control of the cool/warm white light generation from lanthanide ions in monoclinic double tungstate crystals. Journal of Luminescence, 2011, 131, 2212-2215.	3.1	8
32	Laser performances of diode pumped Yb:Lu <sub>2</sub> O <sub>3</sub> transparent ceramic at cryogenic temperatures. Optical Materials Express, 2019, 9, 4669.	3.0	8
33	HiLASE cryogenically-cooled diode-pumped laser prototype for inertial fusion energy. Proceedings of SPIE, 2013, , .	0.8	7
34	Efficient diode pumped Yb:Y <sub>2</sub> O <sub>3</sub> cryogenic laser. Applied Physics B: Lasers and Optics, 2019, 125, 1.	2.2	7
35	Diode-pumped, electro-optically Q-switched, cryogenic Tm:YAG laser operating at 1.88 μm. High Power Laser Science and Engineering, 2021, 9, .	4.6	7
36	Growth and spectroscopy of (Ho,Yb):KLu(WO <sub>4</sub> ) <sub>2</sub> microchip laser by a graphene-based saturable absorber. Laser Physics Letters, 2016, 13, 025801.	1.2	6

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37	Diode-pumped continuous-wave laser operation of co-doped (Ho,Tm):KLu(WO <sub>4</sub> ) <sub>2</sub> monoclinic crystal. Optics and Laser Technology, 2013, 54, 326-328.	4.6	6
38	Cryogenically-cooled Yb:YGAG ceramic mode-locked laser. Optics Express, 2016, 24, 1402.	3.4	6
39	Efficient diode-pumped Er:KLu(WO <sub>4</sub> ) <sub>2</sub> laser at $\lambda = 1611$ nm. Optics Letters, 2018, 43, 218.	3.3	6
40	Diode pumped cryogenic Yb:Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> laser in continuous-wave and pulsed regime. Optics and Laser Technology, 2021, 135, 106720.	4.6	6
41	Spectroscopy and diode-pumped laser operation of transparent Tm:Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> ceramics produced by solid-state sintering. Optics Express, 2020, 28, 28399.	3.4	6
42	Optimization of dopant concentration in Ho:KLu(WO <sub>4</sub> ) <sub>2</sub> laser achieving $\sim 470\%$ slope efficiency. Laser Physics, 2013, 23, 125801.	1.2	5
43	Effect of Gd <sup>3+</sup> /Ga <sup>3+</sup> on Yb <sup>3+</sup> emission in mixed YAG at cryogenic temperature. Ceramics International, 2019, 45, 9418-9422.	4.8	5
44	Monoclinic zinc monotonungstate Yb <sup>3+</sup> ,Li <sup>+</sup> :ZnWO <sub>4</sub> : Part II. Polarized spectroscopy and laser operation. Journal of Luminescence, 2021, 231, 117811.	3.1	5
45	Time-resolved measurement of thermally induced aberrations in a cryogenically cooled Yb:YAG slab with a wavefront sensor. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	4
46	Diode pumped compact cryogenic Yb:YAG/Cr:YAG pulsed laser. Proceedings of SPIE, 2016, , .	0.8	4
47	Continuous-wave and passively Q-switched cryogenic Yb:KLu(WO <sub>4</sub> ) <sub>2</sub> laser. Optics Express, 2017, 25, 25886.	3.4	4
48	Diode-pumped master oscillator power amplifier system based on cryogenically cooled Tm:Y <sub>2</sub> O <sub>3</sub> transparent ceramics. Optical Materials Express, 2021, 11, 1489.	3.0	4
49	Temperature dependent absorption measurement of various transition metal doped laser materials. Proceedings of SPIE, 2015, , .	0.8	2
50	Wavelength tunability of laser based on Yb-doped YGAG ceramics. , 2015, , .		2
51	Passive Q switching of Yb:CNLS lasers by Cr <sup>4+</sup> :YAG and V <sup>3+</sup> :YAG saturable absorbers. Applied Optics, 2018, 57, 8236.	1.8	2
52	High-energy picosecond light source based on cryogenically conduction cooled Yb-doped laser amplifier. Proceedings of SPIE, 2014, , .	0.8	1
53	HiLASE: development of fully diode pumped disk lasers with high average power. , 2015, , .		1
54	HiLASE: a scalable option for Laser Inertial Fusion Energy. Journal of Physics: Conference Series, 2016, 688, 012060.	0.4	1

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55	Temperature dependent spectroscopic characterization of Tm:YAG crystals as potential laser medium for pulsed high energy laser amplifiers. , 2017, , .		1
56	Diode-pumped cryogenic Tm:LiYF <sub>4</sub> laser. , 2019, , .		1
57	Development of high average and peak power laser around 2 $\mu$ m based on cryogenically cooled Tm:Y <sub>2</sub> O <sub>3</sub> transparent ceramic. , 2020, , .		1
58	2.08 $\mu$ m Ho:KLu(WO <sub>4</sub> ) <sub>2</sub> laser resonantly pumped by a diode laser. , 2011, , .		0
59	Simultaneous Dual-Wavelength Laser Operation in Co-Doped (Ho,Tm):KLu(WO <sub>4</sub> ) <sub>2</sub> Crystal. , 2011, , .		0
60	Ho:KRE(WO <sub>4</sub> ) <sub>2</sub> , RE=(Y, Gd, Lu), CW laser performance near 2.1 micron under resonant pumping by a Tm:KLu(WO <sub>4</sub> ) <sub>2</sub> laser. Proceedings of SPIE, 2012, , .	0.8	0
61	Ho <sup>3+</sup> &#x002B; <sup>3+</sup> lasing at 2060 nm in Co-doped Tm, Ho:KLu(WO <sub>4</sub> ) <sub>2</sub> laser. , 2013, , .		0
62	Design of kJ-class HiLASE laser as a driver for inertial fusion energy â€“ CORRIGENDUM. High Power Laser Science and Engineering, 2014, 2, .	4.6	0
63	Cryogenic laser performance of Yb:YAG diode-pumped at 940 nm and 969 nm for high power lasers. , 2014, , .		0
64	Recent progress on an upgrade of the J-KAREN laser at JAEA. , 2015, , .		0
65	Development of a closed-loop cryogenically cooled sub-picosecond regenerative amplifier. , 2015, , .		0
66	Recent Advances on the J-KAREN laser upgrade. , 2015, , .		0
67	Zero-phonon-line pumped cryogenic Yb:YAG passively Q-switched by Cr:YAG. Proceedings of SPIE, 2016, , .	0.8	0
68	Diode-pumped cryogenic Yb:KLu(WO <sub>4</sub> ) <sub>2</sub> laser. , 2017, , .		0
69	Cryogenic Yb:YAG ceramic laser pumped at 940 nm and zero-phonon-line: a comparative study. Optical Materials Express, 2017, 7, 477.	3.0	0
70	Diode â€” Pumped Efficient Cryogenic Yb:Y <sub>2</sub> O <sub>3</sub> Transparent Ceramic Laser. , 2019, , .		0
71	Spectroscopy, Continuous-Wave and Passively Q-Switched Laser Operation of Transparent Tm:LuAG Ceramics. , 2019, , .		0
72	Spectroscopy of Tm:Y <sub>2</sub> O <sub>3</sub> Transparent Ceramic at Cryogenic Temperatures. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
73	2 $\mu$ m MOPA Laser Based on Cryogenically Cooled Tm:Y <sub>2</sub> O <sub>3</sub> Transparent Ceramic. , 2021, , .		0
74	Continuous-wave lasing of monoclinic Ho:KLu(WO <sub>4</sub> ) <sub>2</sub> under in-band excitation by a diode-pumped Tm:KLu(WO <sub>4</sub> ) <sub>2</sub> laser. , 2010, , .		0
75	Microchip Laser Operation of Yb-Doped Gallium Garnets. , 2015, , .		0
76	Status and Development of High Average Power Lasers at HiLASE. , 2018, , .		0
77	Synthesis, Spectroscopy and Efficient Laser Operation of Tm:Lu <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> Transparent Ceramics. , 2019, , .		0
78	Multi-watt continuous-wave and passively Q-switched Tm:CaYAlO <sub>4</sub> micro-lasers. , 2020, , .		0